```
Title:
                   US- 10- 615- 383A- 7 COPY 252 1895
Perfect score:
                   1644
                   1 gagaat acagt acaagacgt . . . . . . . . act t gcct cct gaaaaaact 1644
Sequence:
RESULT 3
ABN93014
I D
      ABN93014 standard: DNA: 2793 BP.
ΧX
ABN93014:
      24-JUL-2002 (first entry)
      Staphylococcus epidermidis ORF nucleic acid sequence SEQ ID NO: 2477.
      Staphylococcus epidermidis; open reading frame; ORF; bacterial infection;
      antibacterial; gene therapy; gene; ds.
      Staphyl ococcus epider midis.
      US6380370- B1.
      30- APR- 2002
      13- AUG- 1998:
                        98US-00134001.
      14- AUG- 1997:
                        97US-0055779P.
      08- NOV- 1997:
                        97US-0064964P.
      (GENO-) GENOME THERAPEUTI CS CORP.
      Doucette-Stamm LA, Bush D;
      WPI: 2002-381255/41.
      P- PSDB: ABP40469.
      Novel isolated nucleic acid encoding a Staphylococcus epidermis
      polypeptide, useful for diagnosing and treating bacterial infections.
      Disclosure; SEQ ID NO 2477; 267pp; English.
      ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading
      frame (CRF) nucleic acid sequences which encode the amino acid sequences given in ABP35124 to ABP37960. The S. epidermidis sequences have
      antibacterial activity and can be used in gene therapy. The sequences can
      also be used in the diagnosis and treatment of bacterial infections, particularly S. epidermidis infections. The sequences can be used to
      screen for compounds able to interfere with the S. epiderm dislife cycle or inhibit S. epiderm dislife cycle or inhibit S. epiderm dislife cycle patent did not form part of the printed specification, but was obtained
      in electronic format directly from the USPTO web site
      Sequence 2793 BP: 1149 A: 423 C: 497 G: 724 T: 0 U: 0 Other:
                                100.0%
                                          Score 1644; DB 1; Length 2793;
  Query Match
  Best Local Similarity
                                100.0%
                                        0: M smatches
  Matches 1644; Conservative
                                                              0; Indels
                                                                               0;
                                                                                    Gaps
                                                                                              0:
              1 GAGAATACAGTACAAGAOGITAAAGATTOGAATATQGATGAATTATCAGATACCAAT 60
Qv
```

Db

151 GAGAATACAGTACAACACGTTAAAGATTCGAATATCGATGATTATCACATACCAAT 210

10615383, t xt Qy Db CATCATCATAACXAAATAAAAAAAACAACAACXAATACXAATACXAATACXAAAAATCXX 180 Qy Dh. TCTAAAGATATAACACAGTCAACAACAACAACTGTAGATGAAAAACGAAGCAACATTTTTACAA 240 Qv TCTAAAGATATAACACAGTCAACAACAAATGTAGATGAAAACGAAGCAACATTTTTACAA 390 Db 331 241 AAGACCCCTCAAGATAATACTCAGCTTAAAGAAGAAGTGGTAAAAGAACCCTCATCAGTC 300 Qy AAGACCCTCAAGATAATACTCAGCTTAAAGAAGAAGTGGTAAAAGAACCTCATCAGTC 450 Db Qy GAATOCTCAAATTCATCAATGGATACTGOOCAACAACCATCTCATACAACAATAAATAGT 360 Db Qy GAAGCATCTATTCAAACAAGTGATAATGAAGAAAATTCCCCCGTATCAGATTTTCCTAAC 420 GAACATCTATTCAAACAAGTGATAATGAACAAAATTCCCCCGTATCACATTTTCCTAAC 570 Db Qy TCTAAAATAATAGAGAGTAACACTGAATCCAATAAAGAAGAGAATACTATAGAGCAACCT 480 TCTAAAATAATAGAGGAACACTGAATCCAATAAAGAAGAGAATACTATAGAGCAACCT 630 Db 481 AACAAAGTAAGAGAAGATTCAATAACAAGTCAACCGTCTAGCTATAAAAATATAGATGAA 540 Qy AACAAAGTAAGAGAAGATTCAATAACAAGTCAACCGTCTACCTATAAAAATATAGATGAA 690 Db AAAATTTCAAATCAAGATGAGTTATTAAATTTACCAATAAATGAATATGAAAAATAAGGTT 600 Qy AAAATTTCAAATCAAGATGAGTTATTAAATTTACCAATAAATGAATATGAAAATAAGGTT 750 Db Qy AGACCGTTATCTACAACATCTQCCCAACCATCGAGTAAGCGTGTAACCGTAAATCAATTA 660 AGACCETTATCTACAACATCTGCCCAACCATCGAGTAACCGTGTAACCGTAAATCAATTA 810 Db GOGGCAGAACAAGGTTCGAATGTTAATCATTTAATTAAAGTTACTGATCAAAGTATTACT 720 Qy COSS ACAACAACSTICSAATCITAATCATTTAATTAAGITACTCATCAAACSTATTACT 870 Dh 721 GAAGGATATGATGATGATGGTGATGGTATTATTAAAGCACATGATGCTGAAAACTTAATCTAT 780 Qy Db Qv 781 GATGTAACTTTTGAAGTAGATGATAACGTGAAATCTGGTGATACGATGACAGTGAATATA 840 GATGTAACTTTTGAAGTAGATGATAAGGTGAAATCTGGTGATAGCATGACAGTGAATATA 990 Db 841 GATAAGAATACAGTTCCATCAGATTTAACCGATAGTTTTGCAATACCAAAAAATAAAAGAT 900 Qy GATAAGAATACAGITTCCATCAGATTTAACCGATAGITTTGCAATACCAAAAATAAAAGAT 1050 Db AATTCTGGAGAAATCATCGCTACAGGTACTTATGACAACACAAATAAACAAATTACCTAC 960 Qv AATTCTGGAGAAATCATCGCTACAGGTACTTATGACAACACAAATAAACAAATTACCTAC 1110 Db Qy 961 ACTITTACAGATTATGTAGATAAATATGAAAATATTAAAGCCCACCTTAAATTAACATCA 1020 ACTITIACAGATTATGTAGATAAATATGAAAATATTAAAGCCCACCTTAAATTAACATCA 1170

Db

```
Qv
         1021 TACATTGATAAATCAAAGGITCCAAATAATAACACTAAGITAGATGTAGAATATAAGACG 1080
              TACATTGATAAATCAAAGGITCCAAATAATAACACTAAGTTAGATGTAGAATATAAGACG 1230
Db
         1081 GCCCTTTCATCAGTAAATAAACAATTACGGTTGAATATCAAAAAACCTAACGAAAAATCGG 1140
Qy
         1231 CCCCTTCATCAGTAAATAAAACAATTACCGTTGAATATCAAAAACCTAACCAAAATCCG 1290
Dh
         1141 ACTGCTAACCTTCAAAGTATGTTCACAAACATAGATACGAAAAAACCATACAGTTGAGCAA 1200
Qv
         1291 ACTOCTAACCITCAAAGTATGITCACAAACATACATACCAAAAACCATACAGITGACCAA 1350
Dh
         1201 ACGATTTATATTAACCCTCTTCGTTATTCAGCCAAAGAAACAAATGTAAATATTTCAGCG 1260
Qy
         1351 ACGATTTATATAACCCTCTTCGTTATTCACCCAAAGAAACAAATGTAAATATTTCAGGG 1410
Db
         1261 AATGGGGATGAAGGTTCAACAATTATCGACGATAGTACAATCATTAAAGTTTATAAGGTT 1320
Qy
              AATGCCCATGAAGGITCAACAATTATCGACGATAGTACAATCATTAAAGGITTATAAGGIT 1470
Db
Qy
         1321 GGAGATAATCAAAATTTACCAGATAGTAACAGAATTTATGATTACAGTGAATATGAAGAT 1380
         1471 GGACATAATCAAAATTTACCAGATAGTAACAGAATTTATGATTACAGTGAATATGAAGAT 1530
Dh
         1381 GTCACAAATGATGATTATQOCCAATTAQGAAATAATAATGACGTGAATATTAATTTTGGT 1440
Qy
         1531 GTCACAAATCATCATTATCCCCAAATTAGCAAATAATAATCACGTCAATATTAATTTTCGT 1590
Db
Qv
         1441 AATATAGATTCAOCATATATTATTAAAGITATTAGTAAATATGAOOCTAATAAGGAOGAT 1500
         1591 AATATACATTCACCATATATTATTAAAGITATTAGTAAATATCACCCTAATAACCACCAT 1650
Db
Qy
         1501 TACACGACGATACAGCAAACTGTGACAATGCAAACGACTATAAATGAGTATACTGGTGAG 1560
         1651 TACACGACGATACAGCAAACTGTGACAAATGCAAACGACTATAAATGAGTATACTGGTGAG 1710
Db
Qv
         1561 TTTAGAACAGCATCCTATGATAATACAATTGCTTTCTCTACAAGTTCAGGTCAAGGACAA 1620
              TTTAGAACACCATCCTATGATAATACAATTCCTTTCTCTACAAGTTCACGTCAACGACAA 1770
Db
         1621 GGTGACTTGCCTCCTGAAAAAACT 1644
Qy
         1771 GGTGACTTGCCTCCTGAAAAACT 1794
Dh
Title:
                US-10-615-383A-7
Perfect score: 2976
Sequence:
               1 at at t gcaaaaaagact t at . . . . . . . . . ccaacaaat at aaggt gt t g 2976
RESULT 4
US- 09- 134- 001C- 2477
  Sequence 2477, Application US/09134001C
  Pat ent No. 6380370
  GENERAL I NFORMATI ON:
   APPLICANT: Lynn Doucette-Stammet al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
STAPHYLOCOCCUS
   TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
   FILE REFERENCE: GTC-007
  CURRENT APPLICATION NUMBER: US/09/134,001C
CURRENT FILING DATE: 1998-08-13
  PRI OR APPLI CATI ON NUMBER: US 60/064, 964
```

```
PRI OR FILING DATE: 1997-11-08
  PRI OR APPLI CATI ON NUMBER: US 60/055, 779
  PRI OR FILING DATE: 1997-08-14
  NUMBER OF SEQ ID NOS: 5674
 SEQ | D NO 2477
   LENGTH: 2793
   TYPE: DNA
   ORGANISM Staphylococcus epidermidis
US- 09- 134- 001C- 2477
 Query Match
                     93.8% Score 2791.4; DB 3; Length 2793;
 Best Local Similarity 99.9%
 Matches 2792; Conservative
                           0; M smatches 1; Indels 0; Gaps
        Qy
           Db
        162 GCAATTAGAAAATTCACAGTACGTACAGCGTCTATTGTAATAGGTGCAGCATTATTGTTT 221
Qy
         61 CAATTAGAAAATTCACAGTAGGTACAGCGTCTATTGTAATAGGTGCAACATTATTGTT 120
Db
        Qy
           GGTTTAGGTCATAATCAGGCCAAAGCTCAGGAGAATACAGTACAAGACGTTAAAGATTCG 180
Db
Qv
        282 AATATGGATGATGAATTATCAGATAGCAATGATCAGTCCAGTAATGAAGAAAAGAATGAT 341
           Dh
Qy
        342 GTAATCAATAATAGTCAGTCAATAAACACCCGATGATGATGATAACCAAATAAAAAAAGAAGAA 401
        241 GTAATCAATAATAGTCAGTCAATAAACAOOGATGATGATAACCAAATAAAAAAAAGAAGAA 300
Db
        Qv
           ACCAATACCAACCATCCCATACAAAATCCCTCTAAACATATAACACACGTCAACAACAAAT 360
Db
        462 GTAGATGAAAACGAAGCAACATTTTTACAAAAGACCCCTCAAGATAATACTCAGCTTAAA 521
Qy
           GTACATGAAAAGGAACAACATTTTTACAAAAGACCCTCAAGATAATACTCACCTTAAA 420
Db
Qy
        522 GAAGAAGTQTAAAAGAAQQCTCATCAGTQGAATQCTQAAATTCATCAATQGATACTQCC 581
           GAAGAAGTEGTAAAAGAACCCTCATCAGTCGAATCCTCAAATTCATCAATGGATACTGCC 480
Db
        582 CAACAACCATCTCATACAACAATAAATAGTGAAGCATCTATTCAAACAAGTGATAATGAA 641
Qy
           CAACAACCATCTCATACAACAATAAATAGTGAAGCATCTATTCAAACAAGTGATAATGAA 540
Db
        642 GAAAATTOOQQQTATCAGATTTTGCTAACTCTAAAATAATAGAGAGTAACACTGAATCC 701
Qv
        541 GAAAATTCCCCCGTATCAGATTTTGCTAACTCTAAAATAATAGAGAGTAACACTGAATCC 600
Db
Qy
        702 AATAAAGAAGAGAATACTATAGAGCAACCTAACAAAGTAAGAAGATTCAATAACAAGT 761
           AATAAAGAAGAGAATACTATAGAGCAACCTAACAAAGTAAGAGAAGATTCAATAACAAGT 660
Db
        762 CAACCGTCTAGCTATAAAAATATAGATGAAAAAATTTCAAATCAAGATGAGTTATTAAAT 821
Qy
        661 CAACCCTCTACCTATAAAAATATAGATGAAAAAATTTCAAATCAAGATGAGTTATTAAAT 720
Db
        822 TTACCAATAAATGAATATGAAAATAAGGITAGACCGITATCTACAACATCTGCCCAACCA 881
Qv
                                 Page 4
```

Db	721	TTACCAATAAATGAATATGAAAATAAGGTTAGACCGTTATCTACAACATCTCCCCAACCA
Qy	882	TCGAGTAACCGTGTAACCGTAAATCAATTACCGGCAGAACAACGTTCGAATGTTAATCAT 941
Db	781	TCCAGTAACCCTGTAACCCTAAATCAATTACCCCCACAACAACCAAC
Qy	942	TTAATTAAAGITACTGATCAAAGTATTACTGAAGGATATGATGATAGTGATGGTATTATT 1001
Db	841	TTAATTAAAGITACTGATCAAAGTATTACTGAAGGATATGATGATGATGATGATGATTATT 900
Qу		AAAGCACATGATGCTGAAAACTTAATCTATGATGTAACTTTTGAAGTAGATGATAAGGTG 1061
Db	901	AAACCACATCATCCTCAAAAACTTAATCTATCTAACTTTCAACTACATCAACACATCAT
Qу	1062	AAATCTGGTGATACGATGACAGTGAATATAGATAAGAATACAGTTCCATCAGATTTAACC 1121
Db	961	AAATCTGGTGATACGATGACAGTGAATATAGATAAGAATACAGTTCCATCAGATTTAACC 1020
Qу	1122	GATAGTTTTCCAATACCAAAAATAAAAGATAATTCTCGGAGAAATCATCCCTACCAGGTACT 1181
Db	1021	GATAGITTTCCAATACCAAAAATAAAAGATAATTCTCGCAGAAATCATCCCTACACGTACT 1080
Qу	1182	TATGACAACACAAATAAACAAATTAOCTACACTTTTTACAGATTATGTAGATAAATATGAA 1241
Db	1081	TATGACAACACAAATAAACAAATTACCTACACTTTTACAGATTATGTAGATAAATATGAA 1140
Qу	1242	AATATTAAAGGGCACCTTAAATTAACATCATACATTGATAAATCAAAGGTTCCAAAATAAT 1301
Db	1141	AATATTAAAGOCCAOCTTAAATTAACATCATACATTGATAAATCAAAGGTTCCAAAATAAT 1200
Qу	1302	AACACTAAGTTAGATGTAGAATATAAGAOGCCCTTTCATCAGTAAATAAAACAATTACG 1361
Db	1201	AACACTAAGITAGATGTAGAATATAAGAOGGOOCTTTCATCAGTAAATAAAAACAATTAOG 1260
Qу	1362	GTTGAATATCAAAAAOCTAACGAAAATO3GACTGCTAACCTTCAAAGTATGTTCACAAAC 1421
Db	1261	
Qy		ATAGATACGAAAAACCATACAGTTGAGCAAACCGATTTATATTAACCCTCTTCGTTATTCA 1481
Db		ATAGATACGAAAAAACCATACAGITGAGCAAACGATTTATATTAACCCTCTTCGITATTCA 1380
Qу		COCAAACAAACAAATGIAAATATTTCAGGCAATGGGGTTCAACGATTATCGAC 1541
Db	1381	
Qy		GATAGTACAATCATTAAAGTTTATAAGGTTGGAGATAATCAAAATTTACCAGATAGTAAC 1601
Db		GATAGTACAATCATTAAAGTTTATAAGGTTGGAGATAATCAAAAATTTACCAGATAGTAAC 1500
Qy		AGAATTTATGATTACAGTGAATATGAAGATGTCACAAATGATGATTATGCCCAAATTAGGA 1661
Db -		AGAATTTATGATTACAGTGAATATGAAGATGTCACAAATGATGATTATGCCCCAATTAGGA 1560
Qy ~:		AATAATAATGACGTGAATATTAATTTTCGTAATATGATTCACCATATATTATTAAAGTT 1721
Db o		AATAATAATGACGTGAATATTAATTTTTCGTAATATGACTTCACCATATATTATTATAAAGTT 1620
Qy =:		ATTAGTAAATATGACCCTAATAAGGACGATTACACGACGATACAGCAAACTGTGACAATG 1781
Db	1621	ATTAGTAAATATGACCCTAATAACGACGATTACACGACGATACAGCAAACTGTGACAATG 1680

10615383, t xt 1782 CAAACGACTATAAATGAGTATACTCGTCAGTTTAGAACAGCATCCTATGATAATACAATT 1841 Qy CAAACGACTATAAATGAGTATACTGGTGAGTTTAGAACAGCATCCTATGATAATACAATT 1740 Db 1842 GCTTTCTCTACAAGTTCACGTCAACGACAAGGTGACTTGCCTCCTGAAAAAACTTATAAA 1901 Qy CTTTCTCTACAAGTTCAGGTCAAGACAAGGTGACTTGCTCCTGAAAAAACTTATAAA 1800 Dh. 1902 ATCGGAGATTACGTATCGGAAGATGTAGATAAAGATCGTATTCAAAAATACAAATGATAAT 1961 Qy ATCCCACATTACCTATCCCAACATGTACATAAACATCCTATTCAAAATACAAATCATAAT 1860 Db Qv 1962 GAAAAACCCCTTAGTAATGTATTCGTAACTTTCACGTATCCCATGCAACTTCAAAATCA 2021 GAAAAACCCCTTAGTAATGTATTGGTAACTTTGACGTATCCTGATGGAACTTCAAAATCA 1920 Db Qy 2022 GTCAGAACAGATGAAGAGGGGAAATATCAATTTGATGGGTTAAAAAAACGGATTGACTTAT 2081 GTCACAACACATCAACACGGCAAATATCAATTTCATCGGTTAAAAAACCCATTCACTTAT 1980 Db Qy 2082 AAAATTACATTOGAAACAOOGGAAGGATATAOGOOGAOGCTTAAACATTCAGGAACAAAT 2141 AAAATTACATTCGAAACACCCCAAGGATATACCCCGACCCTTAAACATTCACGAACAAAT 2040 Db Qy 2142 CCTGCACTAGACTCAGAAGGCAATTCTGTATGGGTAACTATTAACGGACAAGACGATATG 2201 CCTCCACTACACTCACAACCCAATTCTGTATCCGTAACTATTAACCCACAACACACATATG 2100 Db Qy ACTATTCATACCCCATTTATCAAACACTACAATATACCTTACCCAACTATCTATCCTAT 2160 Db 2262 CACACTAATAAACATCCTATTCAACCTCATCAAAAAACCAATCTCTCGCAGTAAAAAGTG 2321 Qy OSS STEARAR TEACHTOTOTAR EARARACTATICATE AND TATE OF TANARACT AND TAN Db Qy 2322 ACGTTAAAAGATGAAAACQGAAATATCATTAGTACAACAACAACTGATGAAAATGGAAAG 2381 ACCITAAAACATGAAAACCCAAAATATCATTACTACAACAACAACTCATGAAAATGCAAAG 2280 Db 2382 TATCAATTTGATAATTTAAATAGTGGTAATTATATTGTTCATTTTGATAAACCTTCAGGT 2441 Qy TATCAATTTCATAATTTAAATACCCCAATTATATTCTTCATTTCATAAACCTTCACCC Dh 2442 ATGACTCAAACAACAACAGATTCTGGTGATGATGACGAACAGGATGCTGATGGGGAAGAA 2501 Qy ATGACTCAAACAACACACATTCTGGTGATGATGACGAACAGGATGCTGATGGGGAACAA Db Qv 2502 GTCCATGTAACAATTACTGATCATGATGACTTTAGTATAGATAACGGATACTATGATGAC 2561 GTCCATGTAACAATTACTCATCATCATCACTTTAGTATACATAACGATAACGATACTATCATCAC 2460 Db 2562 GACTCAGATTCAGATAGTGATTCAGACTCAGATAGCGACGACGACTCAGACTCCGATAGCCAT 2621 Qy CACTCAGATTCAGATAGTGATTCAGACTCAGATAGCCGACTCAGACTCAGACTCCCATAGCCGAT Db 2461 2622 TOOGACTCAGACAGOGACTCAGATTOOGATAGTGATTCAGATTCAGACAGTGACTCAGAC 2681 Qv Db 2521 TCAGATAGTGATTCAGATTCAGACAGCGATTCCCGACTCAGACAGTGACTCAGGATTAGAC 2741 Qy

Db

```
2742 AATAGCTCAGATAAGAATACAAAAGATAAATTACXXXXATACAGCAGCTAATGAAGATCAT 2801
Qv
           2641 AATACCTCACATAACAATACAAAACATAAATTACCCCATACAGCACCTAATGAAGATCAT 2700
Db
           2802 GATTCTAAAGGACATTACTTGGACCTTTATTTGCAGGTTTAGGACCGTTATTATTAGGG 2861
Qy
           2701 GATTCTAAAGGACATTACTTGGAGCTTTATTTGCAGGTTTAGGAGCGTTATTATTAGGG 2760
Db
Qv
           2862 AAGCGTCGCAAAAATAGAAAAAATAAAAATTAA 2894
Dh
           2761 AACCCTCCCAAAATACAAAAATAAAAATTAA 2793
Title:
                   US-10-615-383A-10
Perfect score: 4824
Sequence:
                   1 LKKNNLLTKKKPI ANKSNKY...... FAGLGALLLGKRRKNRKNKN 930
RESULT 3
ABP40469
ID
      ABP40469 standard; protein; 930 AA.
ABP40469:
      24-JUL-2002 (first entry)
      Staphyl ococcus epider midis ORF amino acid sequence SEQ ID NO 5314.
      Staphylococcus epidermidis; open reading frame; ORF; bacterial infection;
      antibacterial; gene therapy.
      Staphyl ococcus epider midis.
      LIS6380370- B1
      30- APR- 2002.
      13- AUG- 1998:
                        98US-00134001.
      14- AUG- 1997:
                        97US-0055779P.
      08- NOV- 1997;
                        97US-0064964P.
      (GENO-) GENOME THERAPEUTI OS CORP.
      Doucette-Stamm LA. Bush D:
      WPI; 2002-381255/41.
      N- PSDB: ABN93014.
      Novel isolated nucleic acid encoding a Staphylococcus epiderm's
      polypeptide, useful for diagnosing and treating bacterial infections.
      Disclosure; SEQ ID NO 5314; 267pp; English.
      ABN90538 to ABN93374 represent Staphyl ococcus epidermidis open reading
      frame (CRF) nucleic acid sequences which encode the amino acid sequences
      given in ABP35124 to ABP37960. The S. epidermidis sequences have antibacterial activity and can be used in gene therapy. The sequences can also be used in the diagnosis and treatment of bacterial infections,
      particularly S. epidermidis infections. The sequences can be used to
      screen for compounds able to interfere with the S. epidemidis life cycle or inhibit S. epidemidis infection. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained
```

Page 7

in electronic format directly from the USPTO web site

XX SQ Sequence 930 AA:

 ∞

Query Match 99.9% Score 4820; DB 1; Length 930; Best Local Similarity 99.9% Matches 929: Conservative 0: M smatches 1: Indels 0: Gaps 0. 1 LKKNNLLTKKKPI ANKSNKYAI RKFTVGTASI VI GAALLFGLGHNEAKAEENTVQDVKDS 60 Qv KKNNLLTKKKPI ANKSNKYAI PKFTVGTASI VI GATLLFGLGHNEAKAEENTVQQVKDS 60. Db Qv 61. NMDDELSDSNDOSSNEEKNDVLNNSQSLNTDDDNQLKKEETNSNDALENRSKDLTQSTTN. 120. NVDDELSDSNDQSSNEEKNDVI NNSQSI NTDDDNQ KKEETNSNDAI ENRSKDI TQSTTN 120 Dh 121 VDENEATFLOKTPODNTQLKEEVVKEPSSVESSNSSMDTAQQPSHTTI NSEASI QTSDNE 180 Qy VDENEATELOKTPODNTOLKEEVVKEPSSVESSNSSMDTACOPSHTTI NSEASI OTSDNE 180 Db Qy 181 ENSRYSDEANSKI I ESNTESNKEENTI EQPIKVREDSI TSQPSSYKNI DEKI SNQDELLN. 240 181 ENSPVSDFANSKI I ESNTESNKEENTI EOPNKVREDSI TSOPSSYKNI DEKI SNODELLIN 240 Db Qy 241 LPI NEYENKVRPLSTTSAQPSSKRVTVNQLAAEQQSNVNHLI KVTDQSI TEGYDDSDQI I 300 LPI NEVENKVRPLSTTSACPSSKRVTVNOLAAECGSSVVNHLI KVTDOSI TEGYDDSDGI I Db 301 KAHDAENI LYDVTEEVDDKVKSGDTMTVNI DKNTVPSDI TDSEALPKI KDNSGELL ATGT 360 Qv 301 KAHDAENLI YDVTFEVDDKVKSCDTMTVNI DKNTVPSDLTDSFAI PKI KDNSCEI I ATCT 360 Db 361 YDNTNKQI TYTETDYVDKYENI KAHLKLTSYI DKSKVPNNNTKLDVEYKTALSSVNKTI T 420 Qy YDNTNKO, TYTETDYVDKYENI KAHLIKLTSYI DKSKVPNNNTIKLDVEYKTALSSVNKTI T 420 Db Qy 421 VEYCKENERTANI ÇEMETNI DTKNHTVEÇTI YI NEI BYSAKETNIVNI SÇNÇDEÇETLI D. 480. VEYOKPNENRTANLOSMETNI DTKNHTVEOTI YI NPLRYSAKETNWNI SONODEOSTI I D. 480 Db 481 DSTLLKVYKVQDXQNLPDSNRLYDYSEYEDVTNDDYAQLGXXNDVNLNEGNLDSPYLLKV 540. Qv DSTU KVYKVODACNI POSNRI VDYSEVEDVTNODVACI GANADANI NEGNI DSPVI I KV. 540 Dh 541 I SKYDPNKDDYTTI QQTVTMQTTI NEYTGEFRTASYDNTI AFSTSSGQQQQDLPPEKTYK 600 Qy I SKYDPNKODYTTI QQTVTMQTTI NEYTGEFRTASYDNTI AFSTSSQQQQDLPPEKTYK 600 Db 601 I GDYVWEDVDKDGI QNTNDNEKPLSNVLVTLTYPDGTSKSVRTDEEGKYQFDGLKNGLTY 660 Qv GDYWEDVDKDG CNTNDNEKPLSWLVTLTYPDGTSKSVRTDEEGXYGFDGLKNG. TY 660 Db 661 KLITETPEGYTPTLKHSGTNPALDSEGNSVWVTI NGQDDMFI DSGFYQTPKYSLGNYVWY 720 Qy 661 KITFETPEGYTPTLKHSGTNPALDSEONSWWTINGODDWTIDSGFYQTPKYSLGNYVWY 720 Db 721 DTNKDGI QQDDEKGI SGVKVTLKDENGNI I STTTTDENGKYQFDNLNSGNYI VHFDKPSG 780 Qv DTNKDG QQDDEKGI SGVKVTLKDENGNI I STTTTDENGKYQFDNLNSGYYI VHFDKPSG 780 Db 781 MTQTTTDSGDDEQDADGEEVHVTI TDHDDFSI DNGYYDDDSDSDSDSDSDSDSDSDSDSDSDSDSD 840 Qy Db

Page 8

```
Qv
          Db
              901 DSKGTLLGALEAG GALLLGKBRKNBKNKN 930
Qy
          901 DSKGTLLGALFAGLGALLLGKRRKNRKNKN 930
Db
                US-10-615-383A-10 COPY 51 598
Title:
Perfect score:
                2808
Sequence:
                1 ENTVQDVKDSNMDDELSDSN......TI AFSTSSQQQQDLPPEKT 548
RESULT 4
ARP40469
     ABP40469 standard; protein; 930 AA.
ABP40469;
     24-JUL-2002 (first entry)
     Staphyl ococcus epider midis ORF amino acid sequence SEQ ID NO: 5314.
     Staphylococcus epidermidis; open reading frame; ORF; bacterial infection;
     antibacterial; gene therapy.
     Staphyl ococcus epider midis.
     US6380370- B1.
     30- APR- 2002
     13- AUG- 1998;
                    98US-00134001.
     14- AUG- 1997;
                    97US-0055779P.
     08- NOV- 1997:
                    97US-0064964P.
     (GENO-) GENOME THERAPEUTI CS CORP.
     Doucet t e- St arm LA, Bush D:
     WPI: 2002-381255/41.
     N- PSDB; ABN93014.
     Novel isolated nucleic acid encoding a Staphylococcus epiderm's
     polypeptide, useful for diagnosing and treating bacterial infections.
     Disclosure: SEQ | D NO 5314; 267pp; English.
     ABN90538 to ABN93374 represent Staphyl ococcus epidermidis open reading
     frame (ORF) nucleic acid sequences which encode the amino acid sequences
     given in ABP35124 to ABP37960. The S. epidermidis sequences have
     antibacterial activity and can be used in gene therapy. The sequences can also be used in the diagnosis and treatment of bacterial infections, particularly S. epiderm dis infections. The sequences can be used to screen for compounds able to interfere with the S. epiderm dis life cycle
     or inhibit S. epidermidis infection. N.B. The sequence data for this
```

in electronic format directly from the USPTO web site

SQ Sequence 930 AA;

	Match Local	Similarity 100.0%
Match	es 54	8; Conservative 0; Mismatches 0; Indels 0; Caps 0;
Qy	1	ENTVQDVKDSNVDDELSDSNDQSSNEEKNDVI NNSQSI NTDDDNQI KKEETNSNDAI ENR 60
Db	51	ENTVODVKOSNVODELSOSNDOSSNEEKNOVI NNSOSI NTODONO; KKEETNSNDAI ENR 110
Cy	61	SKDITQSTTNVDENEATFLQKTPQDNTQLKEEVVKEPSSVESSNSSMDTAQQPSHTTINS 120
Db	111	SKDI TOSTTNYDENEATFLOKTPODNTOLKEEVYKEPSSVESSNSSMOTACOPSHTTI NS 170
Cy	121	EASI QTSDNEENSRVSDFANSKI I ESNTESNKEENTI EQPNKVREDSI TSQPSSYKNI DE 180
Db	171	EASI OTSDNEENSRVSDFANSKI I ESNTESNIKEENTI EOPNKVREDSI TSOPSSYKNI DE 230
Cy	181	KI SNODELLNLPI NEYENKVRPLSTTSAQPSSKRVTVNQLAAEQGSNVNHLI KVTDQSI T 240
Db	231	KI SNODELLNLPI NEYENKVRPLSTTSAOPSSKRVTVNOLAAECGSNVNHLI KVTDOSI T 290
Cy	241	EGYDDSDGI I KAHDAENLI YDVTFEVDDKVKSGDTMTVNI DKNTVPSDLTDSFAI PKI KD 300
Db	291	EGYDDSDGI I KAHDAENLI YDVTFEVDDKVKSGDTMTVNI DKNTVPSDLTDSFAI PKI KD 350
Cy	301	NSŒI I ATGTYDNTNKOJ TYTFTDYVDKYENI KAHLKLTSYI DKSKVPNNNTKLDVEYKT 360
Db	351	NSŒI I ATGTYDNTNKOJ TYTFTDYVDKYENI KAHLKLTSYI DKSKVPNNNTKLDVEYKT 410
Cy	361	ALSSVNKTI TVEYÇKPNENRTANLÇSMFTNI DTKNHTVEQTI YI NPLRYSAKETNVNI SG 420
Db	411	ALSSVIKTI TVEYCKPNENRTANLOSMETNI DTKNHTVEQTI YI NPLRYSAKETNVNI SG 470
Cy	421	NGDEGSTI I DDSTI I KVYKVGDNQNLPDSNRI YDYSEYEDVTNDDYAQLGNNNDVNI NFG 480
Db	471	NGDEGSTI I DOSTI I KVYKVODNONLPDSNRI YDYSEYEDVTNODYACLGNNNOVNI NFG 530
Cy	481	NI DSPYLI KVI SKYDPNKDDYTTI QQTVTMQTTI NEYTGEFRTASYDNTI AFSTSSGQGQ 540
Db	531	NI DSPYI I KVI SKYDPNKODYTTI QQTVTMQTTI NEYTGEFRTASYDNTI AFSTSSGQQQ 590
Cy	541	GDLPPEKT 548
Db	591	ODLPPEKT 598